



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,826	06/13/2005	Jean-Michel Franconi	19320-002US1	5183
26161 7590 02/13/2008 FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022				
EXAMINER LAMPRECHT, JOEL				
ART UNIT 3737		PAPER NUMBER		
MAIL DATE 02/13/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,826

Applicant(s)

FRANCONI ET AL.

Examiner

Joel M. Lamprecht

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Claim Objections

Claims 2-4 are objected to because of the following informalities: In claims 2-4 it is unclear as to which additional step in the method is set forth. The claims only define a contrast agent that is used. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Meade et al (US 6,770,261 B2). Meade et al disclose methods for acquiring electromagnetic signals from the body placed in a system with means for generating a magnetic induction, means for transmitting RF wave pulse sequences (Col 40-46), means for detecting electromagnetic signals from a body part by injecting a contrast agent capable of passing through a zone of the body and causing a chemical shift of a RF of water hydrogen protons (Col 33 Line 1 – Col 36 Line 55, Col 40-46), exciting the body with RF wave pulse sequences in a range of frequencies (Col 40-46), and detecting electromagnetic signals from the body (Col 40-46), corresponding to the MR signals of

the protons of the observed zone having undergone chemical shift. Meade et al disclose the contrast agent as a lanthanide, chosen from dysprosium, praseodymium and europium (Col 8 Line 40-60), with a cage incorporating DOTA or DTPA (Col 8 Line 60 – Col 9 Line 25), forming an image, using at least two series of wave pulses having frequency adjusted to the magnetic induction (Example 5), including a target molecule for affixing to a target as part of an observed zone (Example 3) including a group of cells expressing a gene, deducing RF frequency of the protons of the observed zone after a chemical shift (Example 3-5); finally, the observed zone could be a tumor zone or a group of blood vessels (Col 35 Line 64 – Col 37 Line 60), where the indication or diagnosis for that region is dependent on the RF of the protons of the observed zone having undergone a chemical shift such as a vascularization index (Col 35 Line 64 – Col 37 Line 60). Meade et al also disclose a contrast agent for injection into the body at either the blood-brain barrier or other tissue location providing an element for causing a chemical shift of the resonance frequency of water hydrogen protons (Col 7 Line 38- Col 8 Line 60, Col 40-46), their agent being a lanthanide selected from dysprosium, praseodymium, and europium (Claim 4) and comprising a cage that incorporated DOTA or DTPA (Col 3 Line 1-55).

Response to Arguments

Applicant's arguments filed 11/21/07 have been fully considered but they are not persuasive. With regard to the argument that Meade fails to disclose "at least one element capable of causing a chemical shift of a resonance frequency of water hydrogen protons, Examiner strongly disagrees. Citing the instant application as a

reference source shows that DOTA and DTPA cages both contain elements capable of causing a chemical shift in a resonance frequency of water hydrogen protons. That is, the structures of multiple embodiments of Meade are the same or contain at least the same elements of the instant application and therefore inherently are capable of causing a chemical shift in the resonance frequency of water hydrogen protons. Additionally, with regard to the detection argument, Meade discloses the detection of MR signals from the zones which receive the contrast agents administered (See Col 1 Line 25- Col 2 Line 63 for the background understanding of MRI acquisition as pertains to water hydrogen protons).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joel M. Lamprecht whose telephone number is (571) 272-3250. The examiner can normally be reached on Monday-Friday 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571)272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ruth S. Smith/
Primary Examiner, Art Unit 3737

JML